

IN THE CLAIMS:

Please amend the claims as follows:

1 – 30 (Cancelled)

31. (New) Culture medium conditioned by cytokines and soluble factors released by immortalized untransformed hepatocytes that are differentiated, polarized epithelial cells; said medium being characterized in that it is free from conditioning cells, when used, permitting the maintenance, proliferation and differentiation of adult mammalian cells.

32. (New) Culture medium according to claim 31 wherein said hepatocytes are murine MMH cells.

33. (New) Culture medium according to claim 31 wherein said MMH cells are genetically modified.

34. (New) Culture medium according to claim 31 wherein said cultured mammalian cells are cord-blood stem cells.

35. (New) Culture medium according to claim 31 wherein said cultured mammalian cells are non human embryonic stem cells or adult stem cells including human.

36. (New) Culture medium according to claim 31 wherein said mammalian cells are endodermal, ectodermal and mesodermal or their adult progenitor and stem cells.

37. (New) Culture medium according to claim 31 characterized for further comprising at least one biological molecule selected from the group consisting of proteins, glycoproteins, lipoproteins, carbohydrates, lipids, glycolipids, peptides, antibodies, cytokines, hormones and enzymes.

38. (New) Culture medium according to claim 31 further characterized for being depleted for at least one biological molecule selected from the group consisting of: proteins, glycoproteins, lipoproteins, carbohydrates, lipids, glycolipids, peptides, antibodies, cytokines, hormones and enzymes.

39. (New) Culture medium according to claim 31 wherein said untransformed hepatocytes are genetically modified in order to express at least one specific biological factor selected from the group of: proteins, glycoproteins, lipoproteins, carbohydrates, lipids, glycolipids, peptide, antibodies, cytokines, hormones and enzymes.

40. (New) Culture medium according to claim 31 in form of a solid, a lyophilized, a powder, a gel, a film, or a freeze-dried compound.

41. (New) Culture medium according to claim 34 wherein the maintenance, the proliferation and the differentiation of mammalian cells is performed in order to further condition the MMH-conditioned medium.

42. (New) Process for production of a culture medium comprising the steps of incubating immortalized untransformed hepatocytes that are differentiated, polarized epithelial cells in a culture medium for at least 2 hours and separating said hepatocytes before the use for maintenance, proliferation and differentiation of adult mammalian cells.

43. (New) Process according to claim 42 wherein the separation step is performed by filtration or by centrifugation.

44. (New) Process according to claim 42 wherein said culture medium is RPMI, Ham's F12, Dulbecco's Modified Eagle's Medium (DMEM), RPMI 1640, Iscove's, McCoy's.

45. (New) Process according to claim 42 wherein the cells grow in culture either in suspension or in adherence to an extracellular matrix, as monolayers or three-dimensionally.

46. (New) Process according to claim 45 wherein the matrix is solid, such as plastic, or semisolid like a gels, such as collagen, gelatin or agar.

47. (New) Mammalian cells treated with the conditioned medium according to claim 31 to be used in the medical field.

48. (New) Mammalian cells according to claim 31 to be used for cellular transplantation protocols.

49. (New) Mammalian cells according to claim 31 to be subjected to genetic engineering.

50. (New) Mammalian cells according to claim 31 to be used for the production of biological molecules.

51. (New) Pharmaceutical composition comprising the mammalian cells according to claim 47 to be used in the medical field.

52. (New) Pharmaceutical composition comprising the mammalian cells according to claim 47 to be used in cellular therapy protocols

53. (New) Method for growing, expand, maintain and /or differentiate isolated adult mammalian cells *in vitro* said method comprising the step of placing in contact said cells with the culture medium according to claim 31.

54. (New) Method according to claim 53 wherein said isolated cells are cord-blood stem cells.

55. (New) Method according to claim 53 wherein said isolated cells are non human

embryonal stem cells or adult stem cells.

56. (New) Method according to claim 53 wherein said cells are endodermal, ectodermal and mesodermal and their adult progenitor and stem cells.

57. (New) Method according to claim 53 wherein said cells are NK cells.

58. (New) Method according to claim 53 wherein said cells are dendritic cells.

59. (New) Method according to claim 53 wherein said cells are endothelial cells.

60. (New) Kit for maintenance, proliferation and differentiation of adult mammalian cells, said kit comprising the culture medium according to claim 31 together with laboratory means